

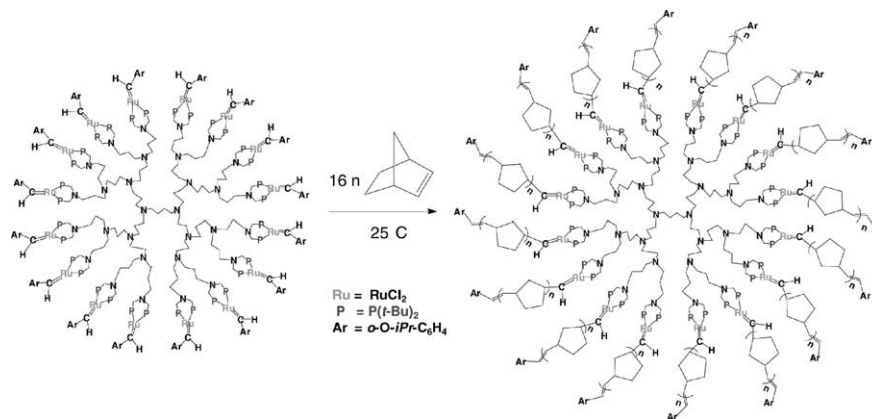
Contents

Articles

Denise Méry, Didier Astruc

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Synthesis of monomeric and dendritic ruthenium benzylidene *cis*-bis-*tert*iobutyl phosphine complexes that catalyze the ROMP of norbornene under ambient conditions

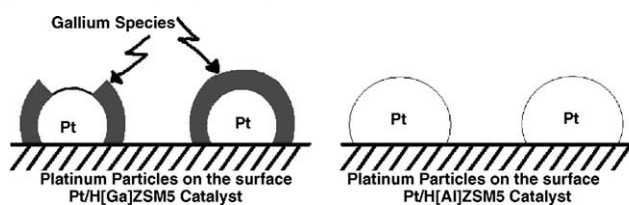


Yraida Diaz, Luis Melo, Marta Mediavilla, Alberto Albornoz, Joaquín L. Brito

Journal of Molecular Catalysis A: Chemical 227 (2005) 7

Characterization of bifunctional Pt/H[Ga]ZSM5 and Pt/H[Al]ZSM5 catalysts. II. Evidences of a Pt–Ga interaction

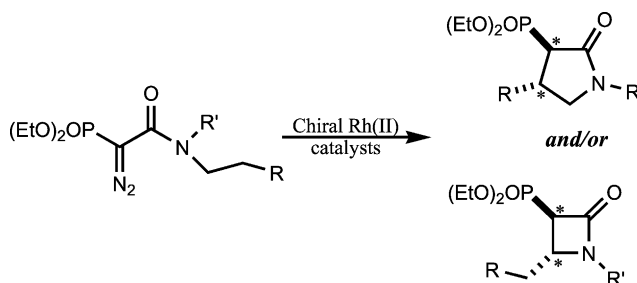
Two supports (gallosilicate and aluminosilicate MFI) as well as the corresponding Pt/MFI bifunctional catalysts were characterized by X-ray photoelectron spectroscopy (XPS) to determine the chemical species on their surfaces. The presence of extra-structural gallium was observed in Pt/H[Ga]ZSM5, which could be found most probably as Ga₂O₃; the presence of Pt⁰, Pt–O_{ads}, and PtO in Pt/H[Ga]ZSM5 and Pt/H[Al]ZSM5 was also observed. It was evidenced an increase in surface gallium concentration as the content of platinum increases in the Pt/H[Ga]ZSM5 solids. The bifunctional catalysts were catalytically tested under standard conditions by the acetone transformation reaction. The results of the catalytic test confirms that the 1.00wt.% Pt/H-[Al]ZSM5 catalyst shows an initial global activity four times higher than the 1.00wt.% Pt/H-[Ga]ZSM5 one, and additionally a selectivity to the desired product (methyl isobutyl ketone, MIBK), three times higher. The activity and selectivity results observed for the Pt/H-[Ga]ZSM5 solids are remarkably similar to those found for the pure H[Ga]ZSM5 support. These results clearly show that the platinum metallic centers on the Pt/H[Ga]ZSM5 catalysts are not active for the hydrogenation reactions of the olefinic and/or carbonylic double bonds, probably due to passivation caused by the gallium species on the surface of the bifunctional catalysts, as proposed in the scheme.



Pedro M.P. Gois, Nuno R. Candeias, Carlos A.M. Afonso

Journal of Molecular Catalysis A: Chemical 227 (2005) 17

Preparation of enantioselective enriched α -(di-alkoxyphosphoryl)lactams via intramolecular C–H insertion with chiral dirhodium(II) catalysts

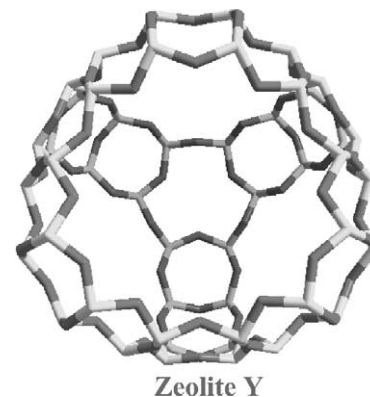


Gonghu Li, Sarah C. Larsen, Vicki H. Grassian

Journal of Molecular Catalysis A: Chemical 227 (2005) 25

Catalytic reduction of NO₂ in nanocrystalline NaY zeolite

In situ transmission FT-IR spectroscopy was employed to investigate the thermal and selective catalytic reduction of NO₂ with propylene in nanocrystalline NaY zeolite.



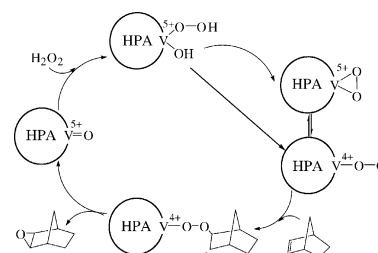
N.K. Kala Raj, A.V. Ramaswamy, P. Manikandan

Journal of Molecular Catalysis A: Chemical 227 (2005) 37

Oxidation of norbornene over vanadium-substituted phosphomolybdic acid catalysts and spectroscopic investigations

Oxidation of norbornene was carried out over vanadium-substituted phosphomolybdic acid catalysts with different oxidants. With aqueous hydrogen peroxide (aq. H₂O₂) the conversion was 70% and epoxide selectivity was 58% at 60°C. With other oxidants like urea-hydrogen peroxide adduct and TBHP the selectivity for epoxide was >96%. Lower selectivity of epoxide with aq. H₂O₂ is attributed to the simultaneous formation of other products, norborneols and 2-norbornanone due to an acid-catalyzed reaction, where acidity comes from the decomposition of aq. H₂O₂. The high selectivity with the other oxidants is attributed to the controlled release of peroxides and low acidic nature. Based on spectroscopic results, a mechanism for the norbornene

oxidation is believed to be proceeding via V(5+)-peroxo and V(4+)-superoxo intermediates.

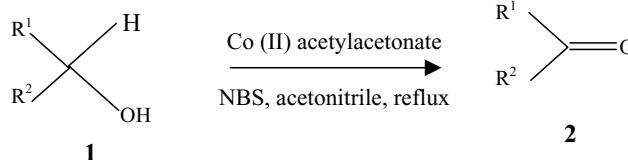


Vishal B. Sharma, Suman L. Jain, Bir Sain

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An efficient cobalt (II) catalyzed oxidation of secondary alcohols to carbonyl compounds with *N*-bromosuccinimide

An efficient cobalt (II) catalyzed oxidation of secondary alcohols to carbonyl compounds with *N*-bromosuccinimide.

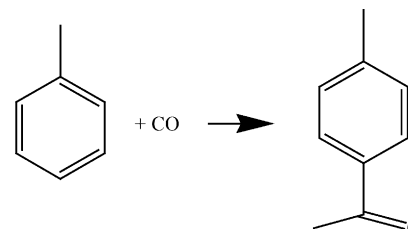


Ernesto J. Angueira, Mark G. White

Journal of Molecular Catalysis A: Chemical 227 (2005) 51

Arene carbonylation in acidic, chloroaluminate ionic liquids

Synthesis of arene aldehydes using acidic, ionic liquids may be a viable preparation where their low vapor pressure combined with their tuned acidity make them attractive conversion agents

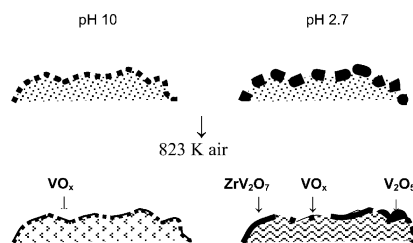


Mario Valigi, Delia Gazzoli, Giovanni Ferraris, Sergio De Rossi, Roberto Spinicci

Journal of Molecular Catalysis A: Chemical 227 (2005) 59

Surface and structural properties of zirconia-supported vanadium oxide. Influence of the preparation pH

Catalysts prepared using microporous hydrous ZrO_2 and solutions containing vanadium species with different sizes (pH 2.7 or 10), heated at 823K, resulted in distinct features both in the support and the supported species. At similar vanadium loading, samples at pH 10 contained a higher fraction of dispersed vanadium species, whose interaction with the support influenced its textural and structural properties.

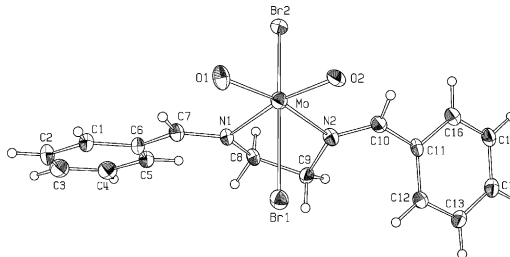


Željko Petrovski, Martyn Pillinger, Anabela A. Valente, Isabel S. Gonçalves, Alan Hazell, Carlos C. Romão

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Preparation and catalytic studies of bis(halogeno)dioxomolybdenum(VI)-diimine complexes

Dichloro- and dibromo MoO_2X_2L complexes containing the ethylenediimine ligands $Ph_2C=NCH_2CH_2N=CPh_2$ (PBED) and $PhCH=NCH_2CH_2N=CHPh$ (BED) have been prepared and tested as catalysts for the epoxidation of cyclooctene with *tert*-butyl hydroperoxide at 55 °C. The dichloro complexes were much more active than the dibromo complexes, with the highest initial activity being observed for $MoO_2Cl_2(BED)$ ($63 \text{ mol mol}_{Mo}^{-1} \text{ h}^{-1}$).

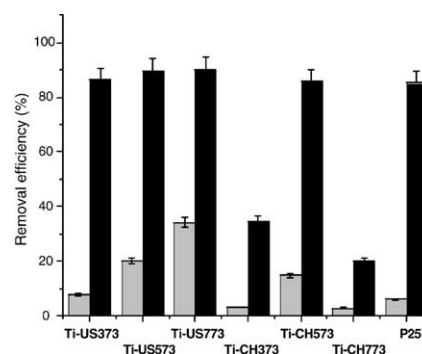


Jianguo Yu, Minghua Zhou, Bei Cheng, Huogen Yu, Xiujian Zhao

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Ultrasonic preparation of mesoporous titanium dioxide nanocrystalline photocatalysts and evaluation of photocatalytic activity

The photocatalytic activity of mesoporous TiO_2 nanocrystalline powders prepared by ultrasonic method is higher than that of commercial Degussa P25 and the samples prepared by conventional hydrolysis method.

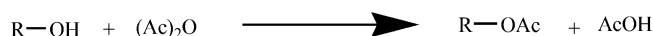


Benjaram M. Reddy, Pavani M. Sreekanth, Yusuke Yamada, Tetsuhiko Kobayashi

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Surface characterization and catalytic activity of sulfate-, molybdate- and tungstate-promoted $Al_2O_3-ZrO_2$ solid acid catalysts

Sulfate-, molybdate- and tungstate-promoted $Al_2O_3-ZrO_2$ solid acid catalysts were synthesized and investigated by various techniques, which provide information that the impregnated sulfate ions show a relatively strong influence on the physicochemical properties of alumina-zirconia. The $SO_4^{2-}/Al_2O_3-ZrO_2$ catalyst exhibits better product yields under very mild reaction conditions for acetylation of alcohols and amines with acetic anhydride in the liquid phase.

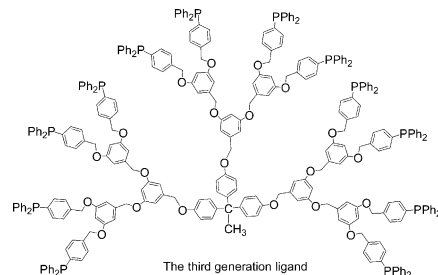


Yi-Yong Huang, Hai-Liang Zhang, Guo-Jun Deng, Wei-Jun Tang, Xia-Yu Wang, Yan-Mei He, Qing-Hua Fan

Journal of Molecular Catalysis A: Chemical 227 (2005) 91

Synthesis of triphenylphosphine-functionalized dendrimers and application to olefin hydroformylation

A new type of triphenylphosphine-functionalized dendrimers were synthesized with convergent method, and successfully applied in the Rh-catalyzed hydroformylation of olefins.

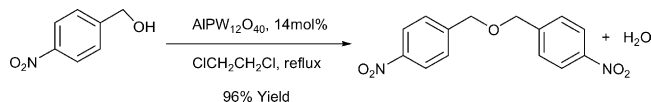


Habib Firouzabadi, Nasser Iranpoor, Abbas Ali Jafari

Journal of Molecular Catalysis A: Chemical 227 (2005) 97

Facile preparation of symmetrical and unsymmetrical ethers from their corresponding alcohols catalyzed by aluminumdodecatangstophosphate (AIPW₁₂O₄₀), as a versatile and a highly water tolerant Lewis acid

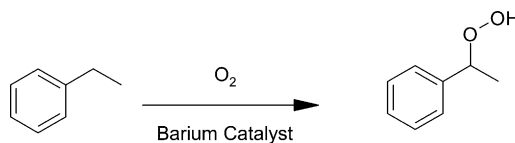
AIPW₁₂O₄₀ as a highly water tolerant Lewis acid is a suitable catalyst for the condensations in which water molecules generated in the process of the reaction. Therefore, efficient etherification of different classes of alcohols was performed using catalytic amounts of AIPW₁₂O₄₀. Preparation of symmetrical dibenzyl ethers especially bis(4-nitrobenzyl)ether also proceeded well with high yields in the presence of catalytic amounts of AIPW₁₂O₄₀. This compound acts as a heterogeneous, efficient and a reusable catalyst when used in aprotic organic solvents.



P.P. Toribio, J.M. Campos-Martin, J.L.G. Fierro

Journal of Molecular Catalysis A: Chemical 227 (2005) 101

Liquid-phase ethylbenzene oxidation to hydroperoxide with barium catalyts



Mingzhong Cai, Gang Liu, Jun Zhou

Journal of Molecular Catalysis A: Chemical 227 (2005) 107

Synthesis of silica-supported poly- ω -(methylseleno)undecylsiloxane palladium(0) complex and its catalytic properties for Heck arylation of alkenes

The silica-supported poly- ω -(methylseleno)undecylsiloxane palladium(0) complex ('Si'-Se-Pd(0)) is a highly active and stereoselective catalyst for arylation of butyl acrylate and acrylamide with aryl halides. This polymeric selenide palladium catalyst can be recovered and reused without noticeable loss of activity.

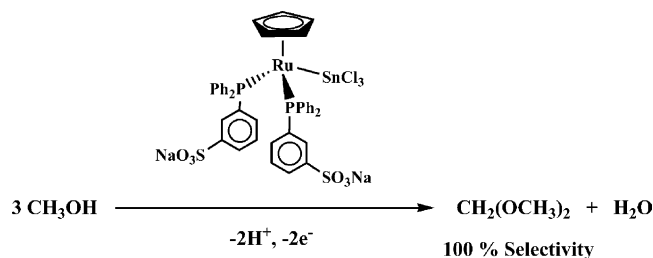


Corey R. Anthony, Lisa McElwee-White

Journal of Molecular Catalysis A: Chemical 227 (2005) 113

Selective electrochemical oxidation of methanol to dimethoxymethane using Ru/Sn catalysts

The Ru(II) half sandwich complexes CpRu(PPh₃)₂(SnCl₃) (1), (Ind)Ru(PPh₃)₂(SnCl₃) (2) and CpRu(TPPMS)₂(SnCl₃) (3) are catalysts for the selective partial electrooxidation of methanol to dimethoxymethane.

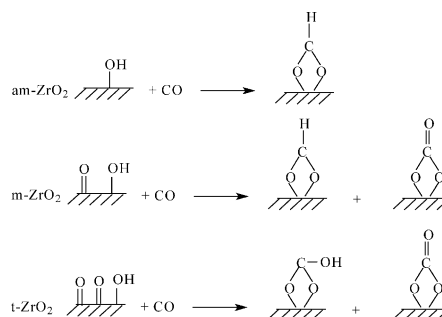


Zhong-Yi Ma, Cheng Yang, Wei Wei, Wen-Huai Li, Yu-Han Sun

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Surface properties and CO adsorption on zirconia polymorphs

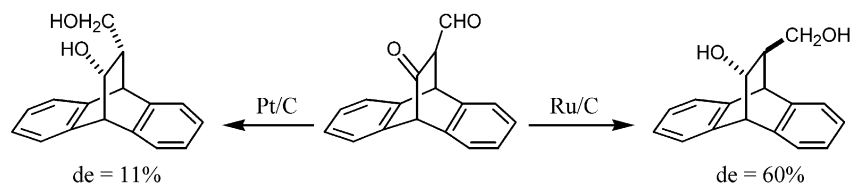
Formate species was formed at higher temperature via CO reaction with hydroxyl groups on amorphous and monoclinic zirconia, while bicarbonate and carbonate species were detected on tetragonal zirconia, whether hydrogen introduced or not.



Raluca Malacea, Mircea Banciu, Mircea Pop, Michèle Besson, Catherine Pinel

Journal of Molecular Catalysis A: Chemical 227 (2005) 125

Diastereoselective hydrogenation of a cyclic β -ketoformyl derivative on supported metal catalysts



Potenzo Giannoccaro, Michele Gargano, Antonello Fanizzi, Carla Ferragina, Antonio Leoci, Michele Aresta

Journal of Molecular Catalysis A: Chemical 227 (2005) 133

Hydrodechlorination of polychlorobenzenes and polychlorinated aliphatic compounds under mild conditions by Pd and Rh ions or their complexes intercalated in γ -zirconium phosphate

Polychlorinated aliphatic and aromatic compounds are effectively hydrodehalogenated under mild conditions using Pd(II), Rh(III) or their complexes with 2,2'-bipyridyl or 1,10-phenanthroline intercalated into γ -zirconium phosphate.



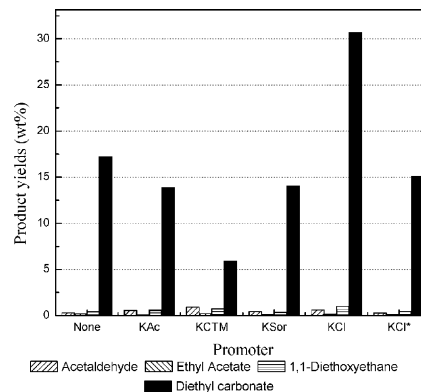
Catalysts: $\gamma\text{-ZrP-M}$; $\gamma\text{-ZrP-M-L}$
 $\gamma\text{-ZrP} = \gamma\text{-Zr}(\text{PO}_4)(\text{H}_2\text{PO}_4)$; M = Pd(II), Rh(III)
 L = 2,2'-Bipyridyl; 1,10-Phenanthroline

Zhen Zhang, Xinbin Ma, Jing Zhang, Fei He, Shengping Wang

Journal of Molecular Catalysis A: Chemical 227 (2005) 141

Effect of crystal structure of copper species on the rate and selectivity in oxidative carbonylation of ethanol for diethyl carbonate synthesis

For the catalyst of $\text{CuCl}_2\text{-PdCl}_2\text{-KCl-NaOH/AC}$, the conversion of ethanol and the yield of diethyl carbonate increased remarkably when the oxygen/ethanol molar ratio was increased from 1:8 to 1:4. However, the catalysts with other potassium promoters showed a slight change in its catalytic performance, when the oxygen/ethanol molar ratio increased.

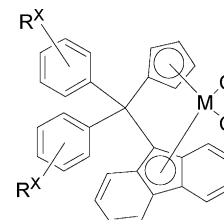


Jiling Huang, Yong Zhang, Xiaoxia Yang, Wei Chen, Yanlong Qian

Journal of Molecular Catalysis A: Chemical 227 (2005) 147

Propylene polymerization of *ansa*-complexes $(\text{R}^X\text{Ph})_2\text{C}(\text{Cp})(\text{Flu})\text{MCl}_2$ ($\text{M}=\text{Zr}$ or Hf) with halogen substituents on phenyl groups

The catalytic properties of $(\text{R}^X\text{Ph})_2\text{C}(\text{Cp})(\text{Flu})\text{MCl}_2$ complexes ($\text{R}^X=\text{Cl}$, F or CF_3 ; $\text{M}=\text{Zr}$ or Hf) in propylene polymerization were studied. The zirconium complex with CF_3 substituents showed high activity and produced partially crystalline s-PP.

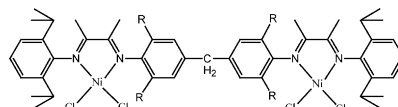


He-Kuan Luo, Herbert Schumann

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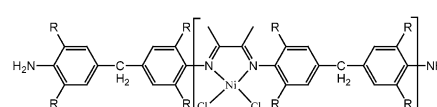
New bi-nuclear and multi-nuclear α -diimine/nickel catalysts for ethylene polymerization

Bi-nickel-centre catalysts and multi-nickel-centre catalysts were prepared by Schiff-base condensation of 2,3-butanedione with 2,6-diisopropylaniline and/or substituted bis-aniline, which demonstrated efficient catalytic activity for ethylene polymerisation under the activation of methyl aluminoxane (MAO).



Bi-nickel-centre catalysts

$\text{R}=\text{CH}(\text{CH}_3)_2$; $-\text{CH}_2\text{CH}_3$; $-\text{CH}_3$



Multi-nickel-centre catalysts

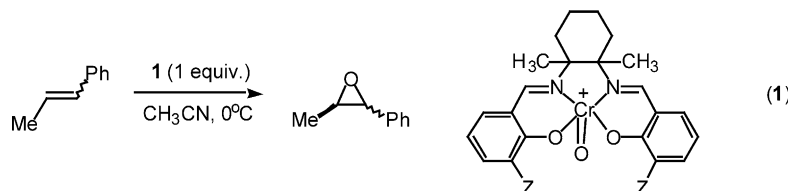
$\text{R}=\text{CH}(\text{CH}_3)_2$; $-\text{CH}_2\text{CH}_3$; $-\text{CH}_3$

Nessan J. Kerrigan, Helge Müller-Bunz, Declan G. Gilheany

Journal of Molecular Catalysis A: Chemical 227 (2005) 163

Salen ligands derived from *trans*-1,2-dimethyl-1,2-cyclohexanediamine: preparation and application in oxo-chromium salen mediated asymmetric epoxidation of alkenes

Stoichiometric asymmetric epoxidation of *E*- β -methylstyrene with novel cationic chromium-salen oxo complexes derived from 1,2-dimethyl-1,2-diaminocyclohexane was studied. The epoxidation results, mass spectrometry of the complexes and a single crystal X-ray crystallographic study of one of the salen ligands suggests the intervention of multiple oxidising species in the reaction.

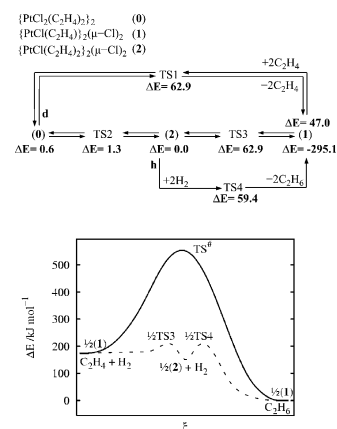


Dario Duca

Journal of Molecular Catalysis A: Chemical 227 (2005) 173

Hydro-dimerization of $\text{Pt}_2\text{Cl}_2(\text{C}_2\text{H}_4)_2$: model reaction to capture details on catalytic mechanisms

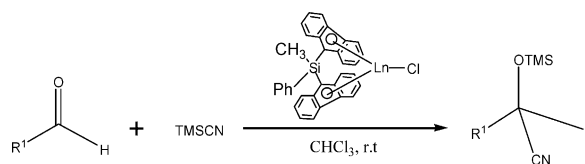
The hydro-dimerization of $\text{PtCl}_2(\text{C}_2\text{H}_4)_2$ has been studied at DFT level. The scheme shows the steps involved in the dimerization (d) and hydrogenation (h) cycles along with some information on the corresponding energetics. In the figure, the solid and dotted lines match the catalyzed (cycle h in the scheme) and uncatalyzed $\text{C}_2\text{H}_4 + \text{H}_2 \rightarrow \text{C}_2\text{H}_6$ reaction. The dramatic catalytic effect of the $\{\text{PtCl}(\text{C}_2\text{H}_4)\}_2(\mu\text{-Cl})_2$ (**1**), species on the ethene hydrogenation is straightforward. The structural and kinetic findings, concerning the hydro-dimerization species, clarify the reaction mechanism and, together with the analysis of $\text{C}_2\text{H}_4/\text{Pt}_n$ models, support the final inference, suggesting an elementary link between homogeneous and heterogeneous catalysis.

**Luo Mei**

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The cyanosilylation of prochiral aldehydes catalyzed by lanthanide complexes

A new series of silylene-bridged rare-earth complexes involving fluorenyl (**1–5**) as very efficient Lewis acidic catalysts in cyanosilylation of aldehydes, giving cyanotrimethylsilyl ethers of aldehydes >99% conversion.



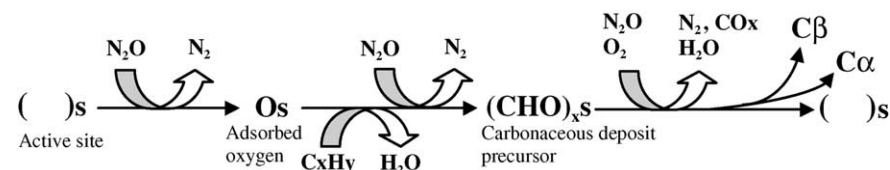
Ln: 1. Yb, 2. Dy, 3. Pr, 4. Sm, 5. Nd

T. Chaki, M. Arai, T. Ebina, M. Shimokawabe

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Catalytic reduction of N_2O by various hydrocarbons over Fe-ZSM-5: nature and reactivity of carbonaceous deposits

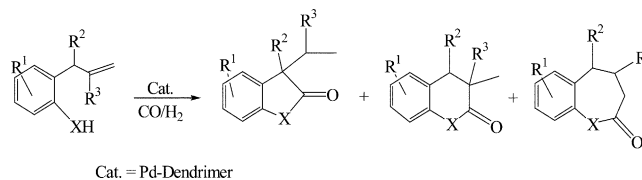
The SCR of N_2O by various hydrocarbons was studied over Fe-ZSM-5. Two types of carbonaceous deposits (C_α and C_β) were formed on the catalyst. Hydrocarbon reductants were phenomenologically divided into three groups, namely CH_4 , C_3H_6 , and others (C_2H_4 , C_2H_6 , C_3H_8), referred to as C_2H_4 groups.

**Rachid Touzani, Howard Alper**

Journal of Molecular Catalysis A: Chemical 227 (2005) 197

PAMAM dendrimer-palladium complex catalyzed synthesis of five-, six- or seven membered ring lactones and lactams by cyclocarbonylation methodology

Palladium complexes immobilized onto generations 0–3 PAMAM dendrimers supported on silica, in the presence of 1,4-bis(diphenylphosphino)butane, were used as catalysts for the cyclocarbonylation of 2-allylphenols, 2-allylaniline, 2-vinylphenol and 2-vinylaniline affording five-, six- or seven membered ring lactones and lactams. Good conversions were realized using the catalytic system, and the catalyst was recycled 3–5 times. The influence of the spacer chain was investigated, as well as the solvent and the CO/H_2 ratio, on the selectivity and the recyclability of the cyclocarbonylation reactions.



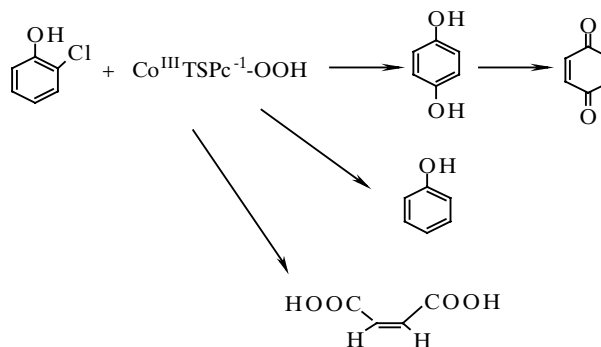
Cat. = Pd-Dendrimer

Bolade Agboola, Kenneth I. Ozoemena, Tebello Nyokong

Journal of Molecular Catalysis A: Chemical 227 (2005) 209

Hydrogen peroxide oxidation of 2-chlorophenol and 2,4,5-trichlorophenol catalyzed by monomeric and aggregated cobalt tetrasulfophthalocyanine

Cobalt tetrasulfophthalocyanine catalyses H_2O_2 oxidation of 2-chlorophenol and 2,4,5-trichlorophenol, with the products depending on the solvent, and the oxidation being mediated by a $\text{Co}^{\text{III}}\text{TSPc}^{-1}$ species.

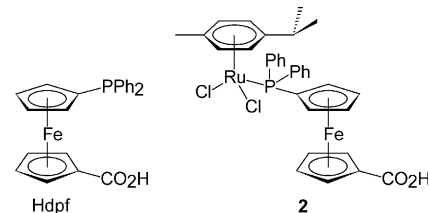


V.R. Choudhary, N.S. Patil, N.K. Chaudhari, S.K. Bhargava

Journal of Molecular Catalysis A: Chemical 227 (2005) 217

Epoxidation of styrene by anhydrous hydrogen peroxide over boehmite and alumina catalysts with continuous removal of the reaction water

MCM-41 molecular sieves modified with Hdprf and/or, $[\{\text{Ru}(\eta^6\text{-}p\text{-cymene})\text{Cl}(\mu\text{-Cl})_2\}]$ and the molecular compound **2** were used as catalysts for the reaction between propargyl alcohol and benzoic acid to give 2-oxopropyl benzoate.

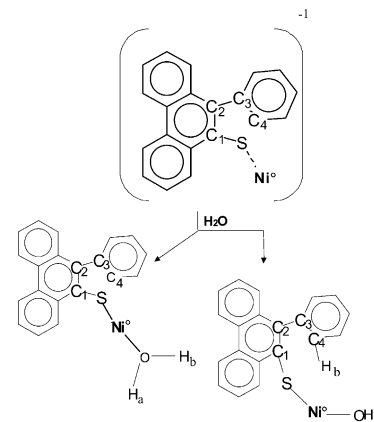


Iván Machín, Juan Carlos de Jesús, Guaicaipuro Rivas, Ingrid Higuerey, José Córdova, Pedro Pereira, Fernando Ruette, Aníbal Sierraalta

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Theoretical study of catalytic steam cracking on a asphaltene model molecule

Reaction scheme of a $[\text{asphaltene-Ni}]^{-1}$ fragment intermediate interacting with H_2O to produce asphaltene- NiOH_2 or asphaltene H-NiOH . In the last case, the asphaltene is hydrogenated and upgraded after interaction with a catalytic Ni-site and H_2O . In addition, a S-C bond is broken, suggesting a sulfur elimination during the catalytic steam cracking.

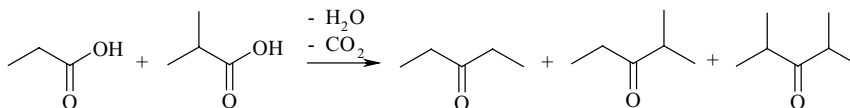


Osamu Nagashima, Satoshi Sato, Ryoji Takahashi, Toshiaki Sodesawa

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Ketonization of carboxylic acids over CeO_2 -based composite oxides

Two symmetric ketones and one asymmetric ketone are formed in a reaction of an equimolar mixture of two carboxylic acids over a CeO_2 -based catalyst. In the reaction of propanoic acid with a linear acid such as butanoic acid, the composition ratio of 3-pentanone, 3-hexanone and 4-heptanone is ca. 1:2:1, which is a binomial distribution. Branched carboxylic acids are less reactive for the ketonization than linear ones. In the reaction of propanoic acid with 2-methylpropanoic acid, 3-pentanone, 2-methyl-3-pentanone and 2,4-dimethyl-3-pentanone are formed with the composition ratio of ca. 1:1:0.1.

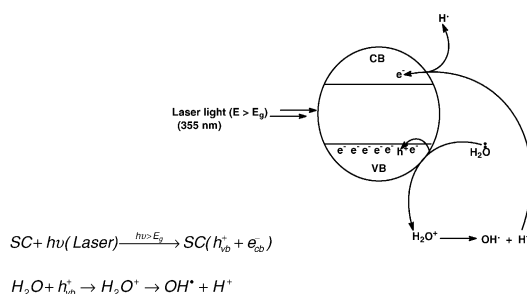


A. Hameed, M.A. Gondal, Z.H. Yamani, A.H. Yahya

Journal of Molecular Catalysis A: Chemical 227 (2005) 241

Significance of pH measurements in photocatalytic splitting of water using 355nm UV laser

The pH changes during the course of photocatalytic splitting of water significantly affect the band edges of the semiconductor and enhance or retard the rate of the splitting process. The measurements on pH changes provide deep insight regarding different processes occurring simultaneously in a photocatalytic process. The effect of pH on photocatalytic activity in splitting of water over WO_3 , TiO_2 (rutile) and NiO by using a monochromatic light source such as laser at 355nm wavelength was studied for the first time in this work.

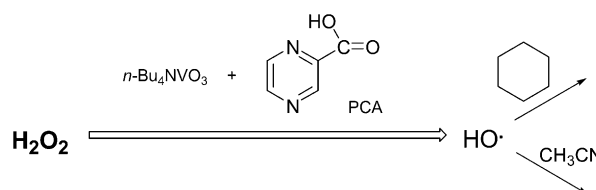


Yuriy N. Kozlov, Galina V. Nizova, Georgiy B. Shul'pin

Journal of Molecular Catalysis A: Chemical 227 (2005) 247

Oxidations by the reagent “ O_2 - H_2O_2 -vanadium derivative-pyrazine-2-carboxylic acid”. Part 14. Competitive oxidation of alkanes and acetonitrile (solvent)

The rate of hydrogen peroxide consumption in an alkane oxidation by the “ O_2 - H_2O_2 - $n\text{Bu}_4\text{NVO}_3$ -PCA” reagent in acetonitrile is noticeably lower in the presence of an alkane than in its absence.

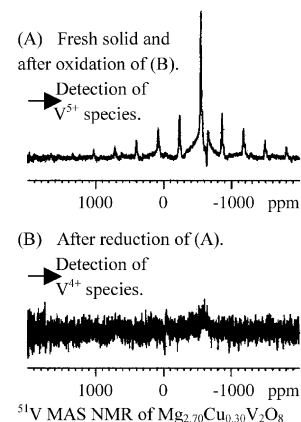


Shigeru Sugiyama, Takuya Hashimoto, Yasuhiko Tanabe, Naoya Shigemoto, Hiromu Hayashi

Journal of Molecular Catalysis A: Chemical 227 (2005) 255

Effects of the enhancement of the abstraction of lattice oxygen from magnesium vanadates incorporated with copper(II) cations on the oxidative dehydrogenation of propane

The influence of the incorporation of copper(II) cations into MgV_2O_6 , $\text{Mg}_2\text{V}_2\text{O}_7$ and $\text{Mg}_3\text{V}_2\text{O}_8$ on the catalytic activities and the mobility of lattice oxygen in those catalysts have been investigated to observe the contribution of lattice oxygen in magnesium vanadates to the oxidative dehydrogenation of propane.

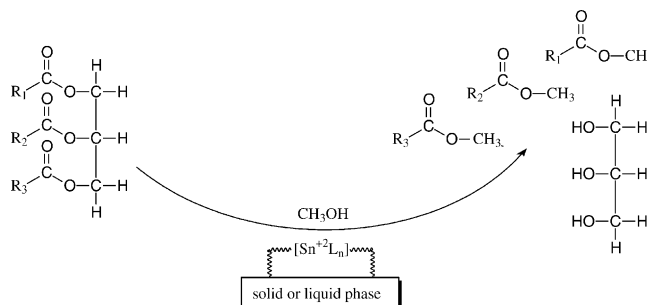


Frederique R. Abreu, Melquizedeque B. Alves, Caio C.S. Macêdo, Luiz F. Zara, Paulo A.Z. Suarez

Journal of Molecular Catalysis A: Chemical 227 (2005) 263

New multi-phase catalytic systems based on tin compounds active for vegetable oil transesterification reaction

New multi-phase systems based on tin oxide and the complex $\text{Sn}(3\text{-hydroxy-2-methyl-4-pyrone})_2(\text{H}_2\text{O})_2$ immobilized in the 1-butyl-3-methylimidazolium hexafluorophosphate ionic liquid or supported it in an ion exchange resin, are shown to be active for soybean methanolysis.

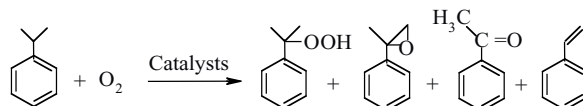


S. Vetrivel, A. Pandurangan

Journal of Molecular Catalysis A: Chemical 227 (2005) 269

Co and Mn impregnated MCM-41: their applications to vapour phase oxidation of isopropylbenzene

The vapour phase oxidation of isopropylbenzene with air was carried out over cobalt and manganese oxide impregnated MCM-41 and Al-MCM-41 gave cumene hydroperoxide, 1,2-epoxy isopropylbenzene, acetophenone and styrene. The presence of Co^{3+} and Mn^{2+} in the mono and bimetal impregnated catalysts was evident through DRS studies. The isopropylbenzene conversion and products selectivity was found to be higher over Co-Mn-MCM-41. The activities of catalysts follow the order Co-Mn-MCM-41 > Co-Mn-Al-MCM-41 (99) > Mn-MCM-41 > Mn-Al-MCM-41 (99) > Co-MCM-41 > Co-Al-MCM-41 (99).

**Hanpei Yang, Yining Fan, Junming Wu, Yi Chen**

Journal of Molecular Catalysis A: Chemical 227 (2005) 279

Structure and properties of BiCeVMoO mixed metal oxides catalysts for selective oxidation of propane

Incorporation a low amount of Ce into the lattice of BiVMoO improved the catalytic performance for selective oxidation of propane to acrolein remarkably. The role of additive Ce in the reaction has been investigated.

